

FORTINET

FortiGate 140D / 140D-POE / 140D-POE-T1

Performance
Consolidation
Protection



June, 28 2013

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- New product features
- Protection from new threats

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- Support technique
- Nouvelles fonctionnalités du produit
- Protection contre de nouvelles menaces

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- Supporto Tecnico
- Nuove funzionalita
- Protezione dalle ultime minacce

Debe registrar el producto para recibir:

- Apoyo técnico
- Nuevas funcionalidades del producto
- Protección contra ataques

登録のお願い

本日、フォーティネット製品の登録をしてください。

登録すると次のメリットがあります。

テクニカルサポート・新機能の追加・新しい脅威への防御

请马上注册

您的飞塔产品

您在注册以后才能得到技术支持、新产品特点信息、最新威胁防护



FortiGate140D, 140D-POE, & 140D-POE-T1
QuickStart Guide

<http://support.fortinet.com/>

Toll free: 1 866 648 4638

Phone: 1 408 486 7899

Fax: 1 408 235 7737

Email: register@fortinet.com

Box Includes



USB Cable



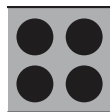
Ethernet Cable



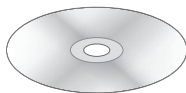
Power Cable



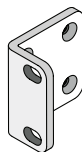
Console Cable



4 Rubber Feet



Tools & Documentation CD



2 Rack-Mount Brackets



8 Bracket Screws

Before You Begin

Write down details that you may need from your network administrator or ISP.

DSL PPPoE

Username

Password

Cable Modem DHCP

It is normal to not require a hostname but your ISP may require it.

Hostname

T1/E1, Static broadband, Cable, or DSL with a static IP

IP Address

Subnet Mask

Default Gateway

Primary/Secondary DNS



QuickStart Guide Video

<http://forti.net/vqsg>

Installation

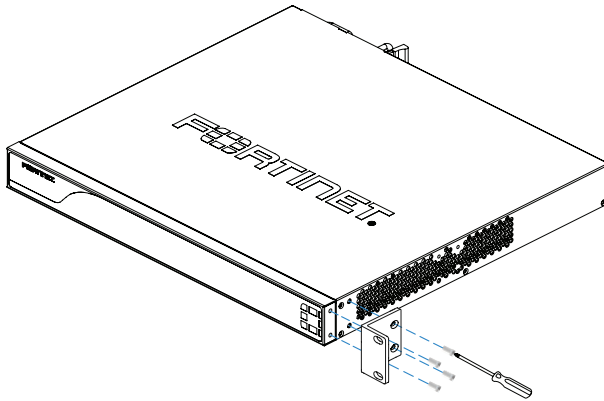
The [FortiGate unit](#) can be placed on any flat surface, or mounted in any standard 19 inch (48.3 cm) rack unit with the provided [rack-mount brackets](#) and [screws](#).

To install the FortiGate unit into a rack

1. Ensure that the [FortiGate unit](#) is placed on a stable surface prior to rack-mount installation.
2. Attach the provided [rack-mount brackets](#) to the sides of the unit using the provided [screws](#).

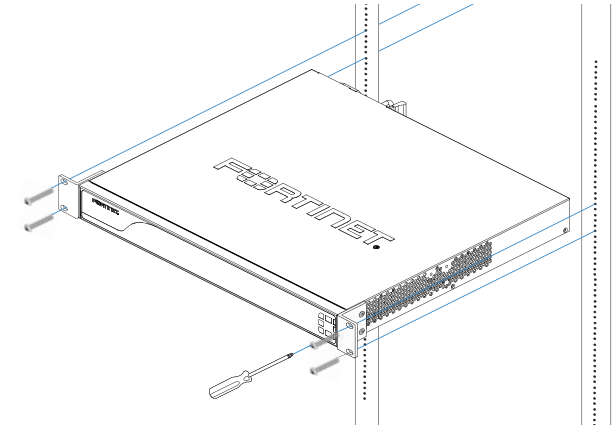
Caution: Electrostatic discharge (ESD) can damage your Fortinet equipment.

POE devices only:
This equipment is to be used in a Network Environment 0 per IECTR 62101. This product is connected only to PoE networks without routing to the outside plant.



3. Position the [FortiGate unit](#) in the rack. Ensure there is enough room around the unit to allow for sufficient air flow.

Caution: To avoid personal injury or damage to the unit, it is recommended that two or more people install the unit into the rack.

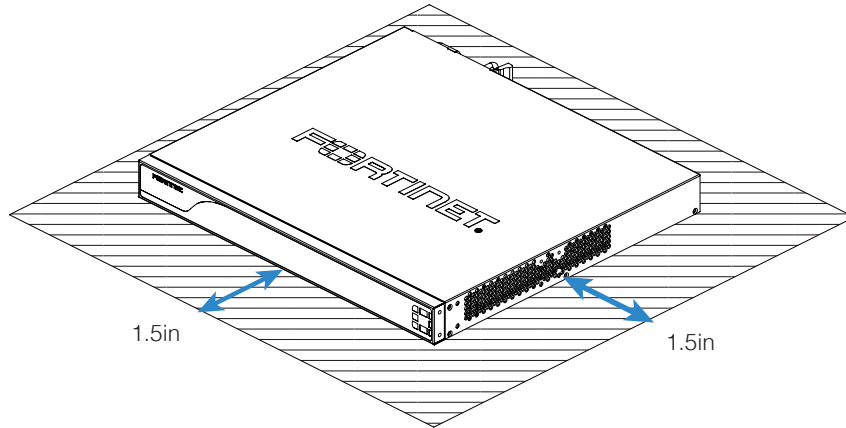


4. Line up the [rack-mount bracket holes](#) to the holes on the rack and ensure that the [FortiGate unit](#) is level.
5. Finger tighten [four rack-mount screws](#) to attach the unit to the rack.
6. Verify that the spacing around the [FortiGate unit](#) conforms to requirements and that the unit is level, then tighten the [rack-mount screws](#) with an appropriate [screwdriver](#).
7. Using the provided [power cable](#), plug the cable into the rear of the unit, and then into a grounded [electrical outlet](#) or separate power source.

Note: If the unit has a redundant power supply, each power cable should be connected to a different power source. In this way, if one power source fails, the other may still be operational and the unit will not lose power.

To install the unit on a flat surface

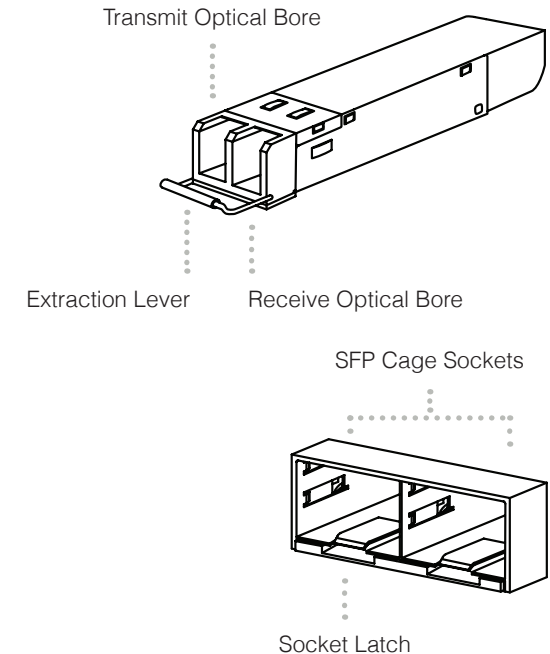
1. Ensure that the surface onto which the **FortiGate unit** to be installed is clean, level, and stable and that there is at least **1.5 inches (3.8cm)** of clearance on all sides to allow for adequate airflow.
2. Attach the provided **rubber feet** to the bottom of the **FortiGate unit**.
3. Place the unit in the designated location.
4. Verify that the spacing around the **FortiGate unit** conforms to requirements and that the unit is level.
5. Using the provided **power cable**, plug the cable into the rear of the unit, and then into a grounded **electrical outlet** or separate power source.



SFP Transceivers

To install the SFP transceivers

1. Ensure that you are properly grounded.
2. Remove the **caps** from the **SFP cage sockets** on the front panel of the unit.



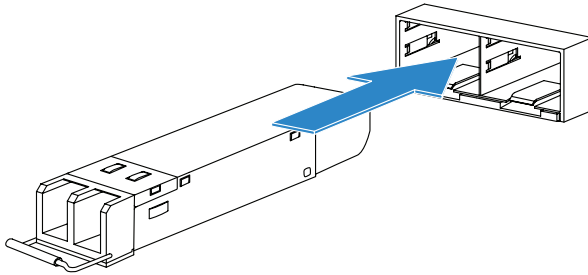
Caution: SFP transceivers are static sensitive devices. Use an ESD wrist strap or similar grounding device when handling transceivers.

Do not install or remove SFP transceivers while fiber-optic cables are still attached. This can cause damage to the cables, cable connectors, and the optical interfaces. It may also prevent the transceiver from latching correctly into the socket connector.

Note: SFP cage socket orientation may vary. Ensure that the SFP transceiver module is correctly oriented each time that you are inserting a transceiver. Installing and removing SFP transceivers can shorten their useful life. Do not install or remove transceivers more than is necessary.

Caution: Do not force the SFP transceivers into the cage slots. If the transceiver does not easily slide in and click into place, it may not be aligned correctly or may be upside down. If this happens, remove the SFP transceiver, realign it or rotate it and slide it in again.

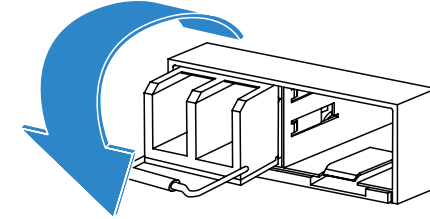
3. Position the **SFP transceiver** in front of the cage socket opening and ensure that the **transceiver** is correctly oriented.
- When the **transceiver** is correctly oriented, the **extraction lever** will be level with the **socket latch**.
4. Hold the sides of the **SFP transceiver** and slide it into the **cage socket** until it clicks into place.



5. Press the **transceiver** firmly into the **cage socket** with your thumb.
6. Verify that the **transceiver is latched correctly** by grasping the sides of the transceiver and trying to pull it out without lowering the **extraction lever**.
If the transceiver cannot be removed, it is installed and latched correctly.
If the transceiver can be removed, reinsert it and press harder with your thumb.
If necessary, repeat this process until the **transceiver** is securely latched into the **cage socket**.

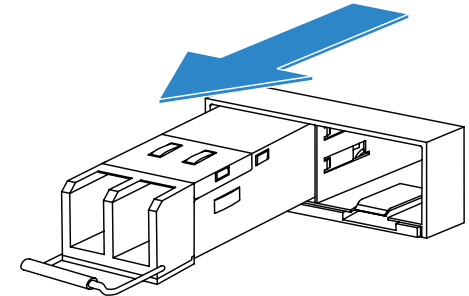
To remove the SFP transceivers

1. Ensure that you are properly grounded.
2. If applicable, disconnect the **fiber-optic cable** from the **transceiver connector** and install a **clean dust plug** in the transceiver's optical bores.
3. Pull the **extraction lever** out and down to eject the **transceiver**. If you are unable to use your finger to open the lever, use a small flat-head **screwdriver** or other similar tool to open the lever.



4. Hold the sides of the **transceiver** and carefully pull it away from the **cage socket**.

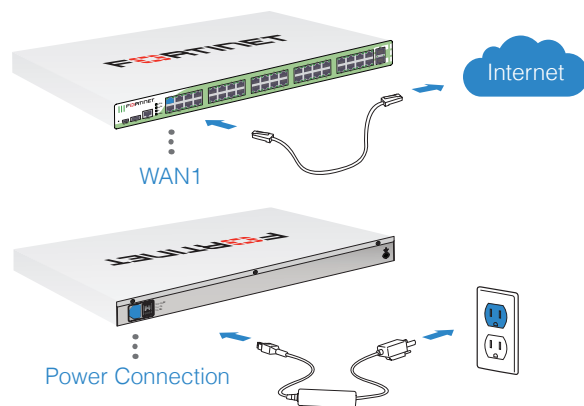
Note: Follow proper fibre-optic handling procedures when installing and removing SFP transceivers to ensure the devices remain clean and are not damaged.



5. Replace the **cap** on the **SFP cage socket** and place the removed **SFP transceiver** into an **antistatic bag**.

1 Basic Connections

Connect your device to an [electrical outlet](#) and an [Internet connection](#).
This is usually a modem, but could also be another device on your network.



2 FortiGate Setup Options

A Web Browser

Setup Wizard (p.13)

B Windows | OS X

With FortiExplorer (pp14-15)

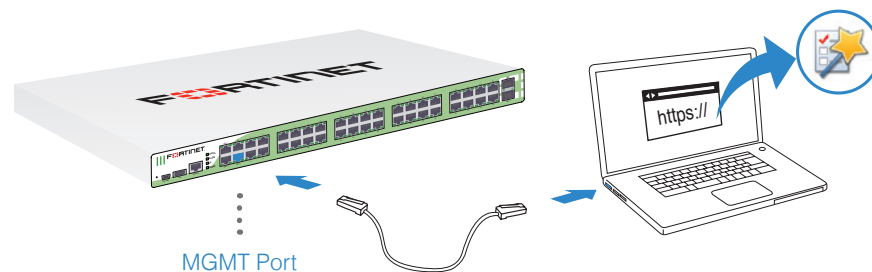
C Terminal Emulation

(p.16-17)

D iOS

FortiExplorer App Configuration
(pp.18-19)

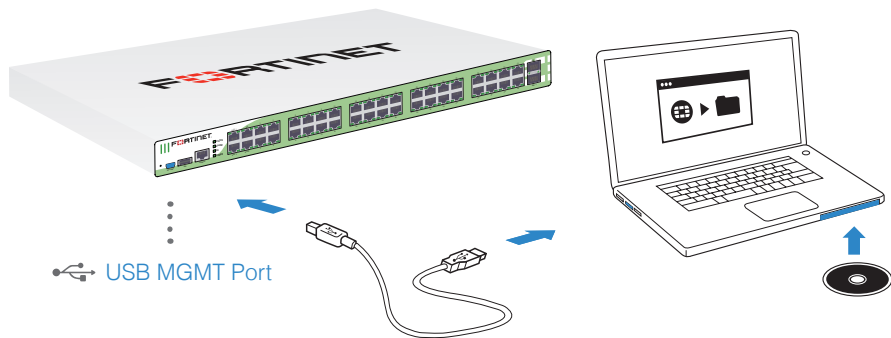
A



Web Browser with Ethernet cable

Web-based Manager

1. Connect the Ethernet cable to the [MGMT port](#) and your computer.
2. Visit 192.168.1.99 in a web browser.
If this does not show the login page, change the IP address of your computer to 192.168.1.2 and try again.
3. Login using username ["admin"](#) and [no password](#).
4. Click ["Wizard"](#) in the top right corner and follow instructions.
5. Register your device from the dashboard page.



Windows/OS X with USB

1. Install FortiExplorer from the included CD or download from <http://forti.net/fexp>.

Microsoft Windows Install

2. Connect the USB cable and launch FortiExplorer if it does not appear automatically.

Mac OS X Install

2. Double-Click the .dmg file and drag the FortiExplorer icon to the Applications folder.
3. Connect the USB cable.
4. Click the FortiExplorer icon to launch the application.



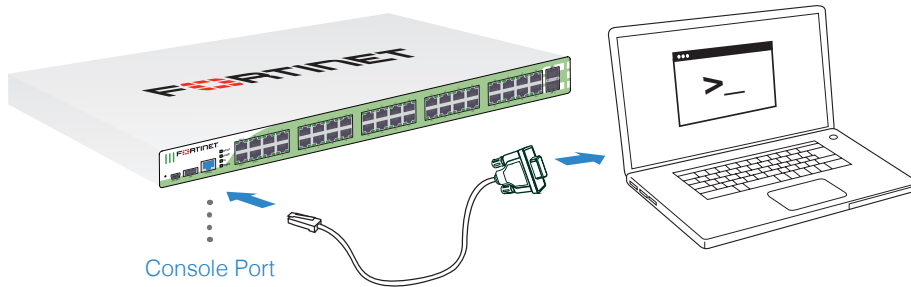
FortiExplorer Setup Wizard

FortiExplorer provides direct configuration access to your FortiGate without modification of the network settings.

Other features and tools include automatic firmware download, easy registration, and access to additional device resources.

1. Follow prompts or click "Register" to register your device with FortiCare.
2. Click "Setup Wizard".
3. Login using username "admin" and no password.
4. Follow Setup Wizard steps.
5. Click "Configure" to complete the setup of your device.

C Terminal Emulation with Console Cable



To Connect to the CLI

1. Connect the **FortiGate unit console port** to the management computer using the provided **console cable**.
2. Start a **terminal emulation program** on the management computer.

Use the following settings:

Baud Rate: 9600
Data bits: 8
Parity: None
Stop bits: 1
Flow Control: None

3. Press **Enter** on your keyboard to **connect to the CLI**.
4. Login using username **"admin"** and **no password**. You can now proceed with configuring your FortiGate unit.

```
FortiGate # ?
config      Configure object.
get         Get dynamic and system information.
show        Show configuration.
diagnose     Diagnose facility.
execute     Execute static commands.
exit        Exit the CLI.

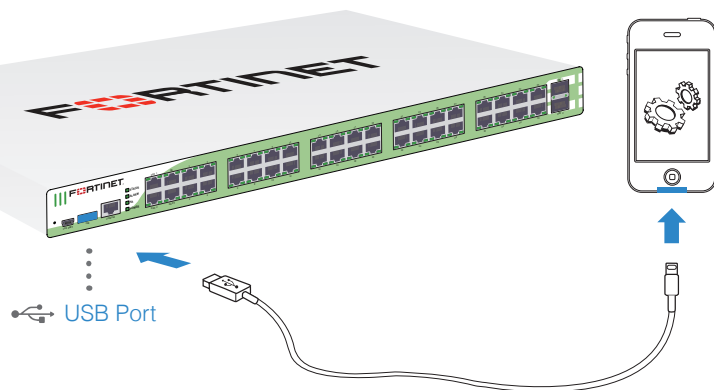
FortiGate # config ?
alertemail  Alert email configuration.
antivirus   AntiVirus configuration.
application Application control configuration.
client-reputation Client reputation tracking configuration
dlp         DLP configuration.
endpoint-control Endpoint control configuration.
firewall    Firewall configuration.
ftp-proxy   FTP proxy configuration.
gui         GUI configuration.
icap        ICAP client configuration.
imp2p       IM & P2P policy configuration.
ips         IPS configuration.
--More--
```

Get started by typing **"?"** for a list of available commands.

Begin typing a command and type **"?"** for a list of available ways to complete.

For example **"config ?"** will show the lowest level of configuration options.

A comprehensive reference guide with all commands can be found at <http://forti.net/cli>.



iPhone/iPad/iPod Touch with Apple USB cable

FortiExplorer App

1. Download the [iOS FortiExplorer App](http://forti.net/fexp-ios) to your device from <http://forti.net/fexp-ios>.
2. Use your Apple USB cable to connect to the USB port.
3. Launch the FortiExplorer App and select the device model.
4. Login using username **"admin"** and **no password**.
5. Configure your device. This version does not have a wizard.



<http://forticlient.com>



<http://forti.net/fexp-ios>

WAN 1 & 2 (RJ-45)

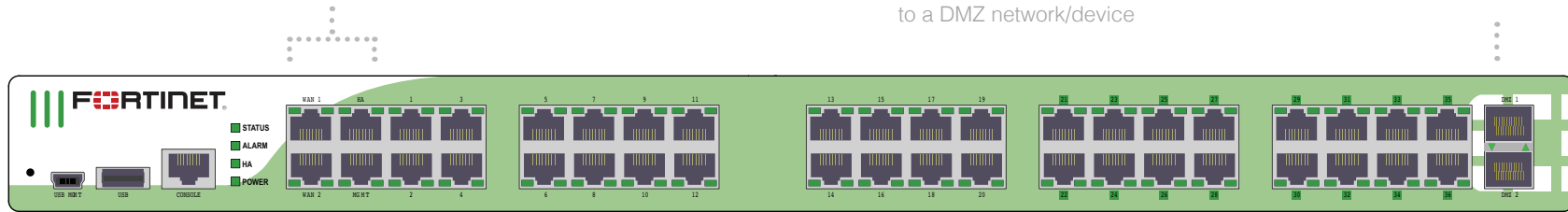
Gigabit Ethernet Internet connection

HA (RJ-45)

Optional connection to other FortiGate units for High Availability (HA)

MGMT (RJ-45)

Client port for management. Default IP address: 192.168.1.99



Console (RJ-45)

Optional connection to the management computer.
Provides access to the CLI



USB (USB-A)

USB server ports for USB key, modem, or
management functions



USB MGMT (USB Mini-B)

USB client port for management

DMZ 1 & 2 (SFP)

1 Gbps/auto small form-factor pluggable transceiver ports for connection
to a DMZ network/device

FortiGate 140D:

LAN Ports 1 - 36 (RJ-45)

Switched Gigabit Ethernet ports for connection to your network & the Internet

POE Models:

LAN Ports 21-36 (RJ-45)

Gigabit Ethernet ports with Power over Ethernet (PoE) up to 15.4W, 802.3af.



Device Guide

FortiGate 140D, 140D-POE, & 140D-POE-T1

Status

- Normal
- ⦿ Booting up
- Major alarm

Logo

- On
- Off

Alarm

- Major alarm
- Minor alarm
- Normal

PoE Status

- PoE device connected and receiving power
- PoE device connected but not receiving
- PoE device not connected

FortiGate 140D-POE & 140D-POE-T1:

HA

- HA mode
- Not in HA mode

Power

- On
- Off

LAN Ports Activity

- Connected
- ⦿ Transmitting & receiving data
- Not in use

LAN Ports Speed

- Connected at 1Gbps
- Connected at 100Mbps
- Connected at 10Mbps or not in use

DMZ Ports

- Active
- ⦿ Transmitting & receiving data
- Not active

Power Switch

Power

FortiGate 140D:

100-240V AC, 3-1.5A, 50/60Hz

FortiGate 140D-POE & 140D-POE-T1:

100-240V AC, 7-3.5A, 50/60Hz

FortiGate 140D-POE-T1:

T1/E1 Port (RJ-45)

T-1 connection.

- Normal
- Has an issue
- Booting up

More Information

On the CD

Device QuickStart Guide

Configuration options, technical specifications, & LED specifications.

<http://forti.net/qsg>

FortiGate Cookbook

Advanced installation and setup, networking, security policies and firewall objects, UTM profiles, SSL VPN, IPsec VPN, authentication, logging and reporting.

<http://forti.net/cookbook>

Web Only

CLI Reference

Advanced configuration of your device using the command line.

<http://forti.net/cli>

Training Services

Course descriptions, availability, schedules, and locations of training programs in your area.

<http://forti.net/training>

FortiOS Handbook

Definitive guide to configuring and operating FortiOS.

<http://forti.net/handbook>

UL/cUL & CE/CB

Safety Cautions and Warnings

Environmental Specifications

Operating Temperature: 0 - 40°C (32 - 104°F)

Storage Temperature: -25 - 70°C (-13 - 158°F)

Humidity: 20 to 90% non-condensing

Operating Altitude: <2250m (7400ft)

Elevated Operating Ambient: If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (T_{ma}) specified by the manufacturer.

Reduced Air Flow: Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

Mechanical Loading: Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

Circuit Overloading: Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

Reliable Earthing: Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

Regulatory Notices

Federal Communication Commission (FCC) – USA

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received; including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

WARNING: Any changes or modifications to this product not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

WARNING (*T1 models only*): This equipment complies with ACTA TIA/EIA/IS-968-B-1 and Part 68 of the FCC rules and the requirements adopted by the ACTA. On the base of this equipment is a label that contains, among other information, a product identifier in the format US: AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

This equipment uses the following USOC jacks: RJ45

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. See installation instructions for details.

The REN is used to determine the number of devices that may be connected to a telephone line. Excessive RENs on a telephone line may result in the devices not ringing in response to an incoming call. In most but not all areas, the sum of RENs should not exceed five (5.0). To be certain of the number of devices that may be connected to a line, as determined by the total REN, contact the local telephone company. The REN for this product is separately shown on the label and also part of the product identifier that has the format US: AAAEQ##TXXXX. The digits represented by ## are the REN without a decimal point (e.g., 03 is a REN of 0.3).

If this equipment causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required until the problem is resolved. But if advance notice is not practical, you will be notified by the telephone company as soon as possible. You will be advised of your right to file a complaint with the FCC if you believe it is necessary. The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning. If you experience trouble with this equipment, or repair or warranty information, please contact the following address and phone number for information.

Fortinet Inc.
1090 Kifer Road, Sunnyvale, CA 94086 USA
1-866-393-9960 (US and Canada)
1-613-725-2466 (International)

It is recommended that the customer install an AC surge arrester in the AC outlet to which this device is connected. This is to avoid damaging the equipment caused by local lightening strikes and other electrical surges.

This equipment may not be used on coin service provided by the telephone company. Connection to party line service is subject to state tariffs.

Industry Canada Equipment Standard for Digital Equipment (ICES) – Canada

CAN ICES-3 (A) / NMB-3 (A)

T1 models only / Version T1 seulement

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

NOTICE: This product meets the applicable Industry Canada terminal technical specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not guarantee the equipment will operate to the user's satisfaction.

AVIS: Le présent matériel est conforme aux spécifications techniques d'Industrie Canada applicables au matériel terminal. Cette conformité est confirmée par le numéro d'enregistrement. Le sigle IC, placé devant le numéro d'enregistrement, signifie que l'enregistrement s'est effectué conformément à une déclaration de conformité et indique que les spécifications techniques Page 14 d'Industrie Canada ont été respectées. Il ne garantit pas que le matériel fonctionnera à la satisfaction de l'utilisateur.

NOTICE: The Ringer Equivalence Number (REN) for this terminal equipment is NAN. The REN assigned to each terminal equipment provides an indication of the maximum number of terminals allowed to be connected to a telephone interface. The termination on an interface may consist of any combination of devices subject only to the requirement that the sum of the Ringer Equivalence Numbers of all the devices does not exceed five.

AVIS: L'indice d'équivalence de la sonnerie (IES) du présent matériel est de NAN. L'IES assigné à chaque dispositif terminal indique le nombre maximal de terminaux qui peuvent être raccordés à une interface téléphonique. La terminaison d'une interface peut consister en une combinaison quelconque de dispositifs, à la seule condition que la somme d'indices d'équivalence de la sonnerie de tous les dispositifs n'excède pas 5.

European Conformity (CE) - EU

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Voluntary Control Council for Interference (VCCI) – Japan

この装置は、クラスA情報技術装置です。この装置を 家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。VCCI-A

Bureau of Standards Metrology and Inspection (BSMI) – Taiwan

這是甲類的資訊產品,在居住的環境中使用時,可能會造成射頻干擾,在這種情況下,使用者會被要求採取某些適當的對策。

China

此為 A 級產品,在生活環境中,該產品可能會造成無線電干擾。這種情況下,可能需要用戶對其採取切實可行的措施。

Grounding

Ensure your Fortinet product is connected and properly grounded to a lightning and surge protector.

WAN or LAN connections that enter the premises from outside the building should be connected to an Ethernet CAT5 (10/100 Mb/s) surge protector.

Shielded Twisted Pair (STP) Ethernet cables should be used whenever possible rather than Unshielded Twisted Pair (UTP).

Do not connect or disconnect cables during lightning activity to avoid damage to your Fortinet product or personal injury.

Electrostatic discharge (ESD) can damage Fortinet equipment. Only perform the procedures described in this document from an ESD workstation. If no such station is available, you can provide some ESD protection by wearing an anti-static wrist strap and attaching it to an available ESD connector or other bare metal object.

Caution (*PoE models only*): This equipment is to be connected only to PoE networks without routing to the outside plant.

This device complies with IEEE 802.3af PoE specification. Do not use any PoE injectors that are not IEEE 802.3af compliant as they may damage your device.

Caution (*T1 models only*): This product is a pluggable type A equipment installed in restricted access location. It has a separate protective earthing terminal (M5 type and 10mm size) provided on the back of the product in addition to the grounding pin of the power supply cord. This separate protective earthing terminal must be permanently connected to earth and the connection is to be installed by a qualified service personnel.

Caution: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to your local regulations.

IMPORTANT: Switzerland: Annex 4.10 of SR814.013 applies to batteries.

警告

本電池如果更換不正確會有爆炸的危險請依製造商說明書處理用過之電池

